In conclusion, we beg leave most cordially to recommend this book to all of our readers, assuring them that, even if very slightly, or not at all acquainted with botany, they will find much to amuse, interest and instruct them.

## The Handbook of British Ferns, comprising scientific and popular Descriptions with Engravings of all the Indigenous Species and Varieties, with Instructions for their Cultivation. By T. MOORE, F.L.S. &c. Second edition. London, 1853.

This new edition of Mr. Moore's nice little Handbook is one-half larger than its predecessor, and in many other respects much improved. The introductory remarks upon the structure of Ferns have been very much extended, and a clear statement of the views of Suminski and others on the obscure subject of their reproduction is included amongst them. Then follows an account of the geographical distribution of our native species; directions for their culture; and their classification. In the latter no material change is made from the mode of arrangement that is now most generally adopted, but an account is given of the recent schemes of Mr. J. Smith of Kew, and Mr. Newman, and reasons pointed out which militate against their acceptance. In not adopting the views of those distinguished students of, and writers concerning, Ferns, we think that Mr. Moore has done wisely. It seems to us that the new arrangement derived from the mode in which the fronds are developed from the caudex, and their articulation to it, would lead to the separation of groups far more natural than those which it would form.

With the chapter headed Classification the introductory part of this book may be said to conclude; the remainder of it being occupied by a detailed account of the several genera and species; this part of the work is a very great improvement upon the corresponding part of the former edition.

The Polypodium alpestre is placed in that genus, as we think correctly, and we concur with the author in not being as yet convinced that the *Pseudathyrium Aexile* of Newman is distinct from it. We believe that our friend Mr. Backhouse does consider that they are different species, and as he has had the opportunity of studying the two plants in their native wilds, and his opinion would otherwise have had considerable weight with us, we think it right to suspend our judgement on the matter, which will doubtless be fully discussed in Mr. Newman's long-delayed new edition of the History of British Ferns.

A very nice figure of the *Gymnogramma leptophylla* is added to this edition. We may hope that now that it has been determined to be certainly a native of Jersey, it will soon be detected in Cornwall or the warm southern part of Devonshire. The botanists of those districts will do well to search carefully for it in spring upon moist banks having a southern aspect.

Mr. Moore has joined the Lastrea spinulosa to the L. cristata, considering that Mr. Newman's L. uliginosa connects them. Doubtless there is much difficulty in determining the true place of L. uliginosa, the fertile fronds of which do certainly very closely resemble those of *L. spinulosa*, but we do not think that there is, at present, sufficient evidence to show that it is really a connecting link between the latter plant and *L. cristata*.

From the plants that have been usually combined under the name of *Athyrium filix-famina*, the variety *convexum* of Newman is separated, and stands as a species under the name of *A. rhæticum*, Roth. We are inclined to admit this "split," on account of the constant dissimilarity of the plants. The *A. rhæticum* can hardly be confounded with any of the forms of the variable *A. filix-famina*. We are not satisfied that the correct name has been adopted for it, because there remain some doubts as to what plant was intended by Linnæus under the name of *Polypodium rhæticum*.

With these remarks we conclude, only adding that we can cordially recommend Mr. Moore's book.

## Beiträge zur Mycologie. Von G. FRESENIUS, M.D. Frankfurt A. M. 1850, 1852. Hefte 1, 2. 4to, pp. 38. pl. 4, & pp. 80. pl. 5.

It has been objected against the German botanists of the presentday, and not without good reason, that they work too frequently in almost utter ignorance of what is done by French and English botanists as regards the very subjects on which they are occupied. If this applies with any degree of justice to those who are engaged in the study of Phænogamous plants, much more so is the charge applicable to their Cryptogamists. Species which are in the hands of every one, and which have been long since described, are daily brought forward as new, and this frequently even where German authors have already published their observations. One lichenologist, for instance, coolly states his ignorance of the works of Hedwig and Dillenius, while others professedly have never consulted the large collections of Corda, and even in publications like Sturm's Deutschlands Flora, a work which bears a high character for general correctness, many species appear under new names which have long since been published, while representations of things entirely different are given for common species, such as Peziza aurantia.

Meanwhile it is most unfortunate as regards Mycology, that the copious collection of Rabenhorst, though containing many subjects of first-rate interest, is so little to be trusted in respect of nomenclature. Some very gross errors have been pointed out by the editor himself, who seems to depend very greatly upon others, not only for specimens, but for names, and we could ourselves furnish a list of some length. We believe that Klotzsch has had little or nothing to do with the work, since the completion of the second number.

If however a very glaring instance is wanted in confirmation of our remarks, we need but refer our readers to the work of Bonorden on Mycology, which, though containing some good figures amidst a good deal of trash, is full from one end to the other of the grossest blunders, not only as regards synonyms and nomenclature, but even in points of affinity, where the merest tyro might have come to a true judgement. It is therefore with some pleasure that we are able to